

What is claimed is:

1. A rotary press comprising:

a first printing unit including a pair of a first blanket cylinder and a first plate cylinder for printing a first color on one side of printing paper and two pairs of second and third blanket cylinders and second and third plate cylinders which oppose each other with respect to the first blanket cylinder for printing the first color and a second color on the other side of the printing paper, wherein the second and third blanket cylinders contact the first blanket cylinder with a predetermined angle formed between the second and third blanket cylinders with respect to the first blanket cylinder so that the printing paper passing through the first through third blanket cylinders contact the first through third blanket cylinders in a surface-to-surface contacting manner;

a second printing unit including a pair of blanket cylinders and a pair of plate cylinders which are located in each side of the printing paper having passed the first printing unit, in order to print a second color on one side of the printing paper and print a third color on the other side thereof; and

a third printing unit including a pair of a fourth blanket cylinder and a fourth plate cylinder for printing a fourth color on one side of the printing paper having passed through the second printing unit and two pairs of fifth and sixth

blanket cylinders and fifth and sixth plate cylinders which oppose each other with respect to the fourth blanket cylinder for printing the third color and the fourth color on the other side of the printing paper, wherein the fifth and sixth blanket 5 cylinders contact the fourth blanket cylinder with a predetermined angle formed between the fifth and sixth blanket cylinders with respect to the fourth blanket cylinder so that the printing paper passing through the fourth through sixth blanket cylinders contact the fourth through sixth blanket 10 cylinders in a surface-to-surface contacting manner.

2. A rotary press comprising:

a first printing unit including a first blanket cylinder, a first direct-printing cylinder and second and third blanket 15 cylinders which contact the outer circumference of the first blanket cylinder in sequence, and second and third plate cylinders which are formed on one side of the second and third blanket cylinders, respectively, wherein printing paper advances between the first blanket cylinder and the first direct-printing cylinder and then passes through the first 20 through third blanket cylinders to be discharged toward the next printing stage, so that first through third colors are printed on one side of the printing paper; and

a second printing unit including a pair of blanket

cylinders and a pair of plate cylinders which are located in each side of the printing paper having passed the first printing unit, in order to print a fourth color on one side of the printing paper and print the first color on the other side thereof.

5

3. The rotary press according to claim 2, further comprising: a third printing unit including a fourth blanket cylinder, a second direct-printing cylinder and fifth and sixth blanket cylinders which contact the outer circumference of the fourth blanket cylinder in sequence, and fifth and sixth plate cylinders which are formed on one side of the fifth and sixth blanket cylinders, respectively, wherein the printing paper having passed the second printing unit passes through the fourth through sixth blanket cylinders to then pass through between the fourth blanket cylinder and the second direct-printing cylinder to be discharged out, so that the second through fourth colors are printed on the other side of the printing paper.

20